

WHAT IS CLAIMED IS:

1. An optical communication module for performing single-core bi-directional communication, comprising:

an optical fiber;

a light-emitting element for emitting light; and

a photoreceptor element for receiving light,

wherein said optical fiber has an end face, said end face having an inclined part to form a reflecting surface;

wherein any one of said light-emitting element and said photoreceptor element is arranged with said one of the elements facing said end face of said optical fiber, and the other of said light-emitting element and said photoreceptor element is arranged beside said optical fiber with the other element facing said reflecting surface; and

wherein said photoreceptor element is arranged outside a maximum diffusion range of the light emitted from said light-emitting element.

2. The optical communication module according to claim 1, wherein a whole of said end face of said optical fiber is obliquely inclined to form the reflecting surface.

3. The optical communication module according to claim 1, wherein said light-emitting element is arranged with the element facing said end face of said optical fiber, and

wherein a support member for said light-emitting element is attached to said end face of said optical fiber as abutted thereto.

4. The optical communication module according to claim 3, wherein a support member for said photoreceptor element is attached to the support member for said light-emitting element with the members being abutted.

5. The optical communication module according to claim 1, wherein said end face of the optical fiber has an obliquely inclined reflecting surface, said obliquely inclined reflecting surface including a portion of an end face of a core, said portion also being at least a part of said end face of the optical fiber.

6. The optical communication module according to claim 5, wherein said reflecting surface inclines at an angle of about 45 degrees with respect to an optical axis of said fiber.

7. The optical communication module according to claim 1, wherein a light-receiving plane normal line of said photoreceptor element is arranged at an angle of about 90 degrees with respect to an optical axis of said fiber.

8. The optical communication module according to claim 1, wherein said light-emitting element is a surface-emitting semiconductor laser.

9. A connector incorporating an optical communication module, said optical communication module comprising:

a circuit for performing conversion between an electric signal and an optical signal;

an optical fiber;

a light-emitting element for emitting light; and

a photoreceptor element for receiving light,

wherein said optical fiber has an end face, said end face having an inclined part to form a reflecting surface;

wherein any one of said light-emitting element and said photoreceptor element is arranged with said one of the elements facing said end face of said optical fiber, and the other of said light-emitting element and said photoreceptor element is arranged beside said optical fiber with the other element facing said reflecting surface; and

wherein said photoreceptor element is arranged outside a maximum diffusion range of the light emitted from said light-emitting element.